CHAPTER II
THE IMPLEMENTATION OF JIGSAW TECHNIQUE TO IMPROVE STUDENTS' READING COMPREHENSION

A. The Nature of Reading Comprehension

1. Reading

Reading is one of the activities to discover information or ideas from a text. Reading is a highly complex skill required for success in a world where large amounts of information are provided in written form (Rayner et al., 2012). Therefore, reading is very important in the classroom when learning English because students can gain knowledge or ideas from the text. Reading is more than simply speaking the printed or line-by-line content of a written page (Sulaiman & Putra, 2017).

The reading process is divided into three models: bottom-up, top-down and interactive (Mohseni Takaloo et al., 2017). Here is a detailed description of each of these models:

a. Bottom-up Model

The reader is supposed to be part of a mechanical process in which he or she detects the text letter by letter, word by word, and sentence by phrase in bottom-up models. The reader decodes the text that the writer has already encoded.

b. Top-down Model

The top-down reading model focuses on the reader transforming the text to arrive at meaning. The reader's mind has already begun to analyze a text with meaning-oriented processes or a hypothesis about the meaning of the text. Readers use letters and words to support their assumptions about the meaning of the text. The primary goal of reading in these models is to make sense of the text rather than mastering letters and words. Readers must recognize unfamiliar terms using meanings and grammatical signs and be able to understand a chapter even if they do not understand all of the words.

c. Interactive Model

Information in the top-down and bottom-up models does not scale in the same way, and information from higher levels does not affect information from lower levels. These models cannot be used to draw conclusions based on what has been read. Accordingly, the interactive reading model is proposed as a solution to this problem. This model, which combines top-down and bottom-up approaches, is generally recognized as a comprehensive explanation of how humans infer meaning from written texts. The fact that meaning lies not only in the text but in the combination of the author's text and the reader's interpretation, has led to the development of the interactive reading model. Accordingly, reading necessitates a mental relationship between the reader and the writer's material. This allows information from higher levels to interact and influence information from lower levels.

2. **Reading Comprehension**

Reading comprehension is the process of making meaning from text. The purpose of reading, which is one of the four language skills, is to comprehend the ideas and meanings of texts. Meanwhile, mastering something with one`s intellect to collect the significance of the information being studied is known as comprehending. Reading comprehension is an important skill for mastering many aspects of reading information. When a reader comprehends the content of the reading, readers are better able to apply what they have learned. Reading and comprehension are closely related (Hafis, Anita & Rahmawati, 2020). According to (Woolley, 2011) Reading comprehension is the process of extracting meaning from a text. Readers must master many components from reading comprehension to reading comprehension.

Reading comprehension is knowledge of the terminology used in written texts and creating connections between them to achieve a full understanding is what is all about. The usage of reading comprehension methods is the most significant aspect of reading comprehension. The items

of teaching reading comprehension have received a lot of attention in terms of prior knowledge and the application of cognitive techniques. Success in the development of reading comprehension is not an inherent skill; rather, it is linked to metacognitive techniques, and reading is the most significant language skill among other abilities, particularly when English is used as a second language.

3. **Aspects of Reading Comprehension**

Reading comprehension, like any other skill, has specific signs that may be used to assess the students' comprehension. There are a few points on reading comprehension (King & Stanley, as cited in Juita 2013). There are the aspects to consider:

a. Finding Factual Information

Finding Factual Information involves a scan of key information by the reader. Students are usually given factual knowledge questions and questions that begin with the letter WH. There are many different sorts of questions: causes, aims, outcomes, timing, comprehension, and so on. Where can find the solution in the text.

b. Finding the Main Idea

The beginning of a paragraph's main idea is important because it helps students not just understand the paragraph on first reading, but also in remember its contents after. The main idea can be presented directly or implicitly, and a subject sentence appears in a paragraph with an explicit main idea, either at the beginning or at the end. In the middle of a paragraph or at the end. A paragraph with an implied primary concept, on the other hand, does not contain a subject sentence.

c. Finding the Meaning of Certain Words

Finding the meaning of certain words , by relating the near meaning of unknown words to the context in the text, readers can improve their cognitive ability to predict new terms. When these terms have or almost have the same meaning as other words, it have a similar

connotation. Students are expected to be able to create and comprehend the meaning.

d. Identifying References

  The relationship between one language phrase and another character, skill, etc. there is known as a reference. The usage of demonstrative pronouns in the reading text is referred to as a reference in reading comprehension. Short pronouns, such as such, we, they, he, she, this, and so on, are frequently used as reference terms. The reader will be able to grasp the reading if can recognize the reference terms and identify the referred words.

e. Identify conclusions

  To recognize inference, the reader must be able to read between the lines. Finally, students must be able to extract messages from the text and predict what will occur next. Information from the text is referenced. Students will be able to think critically to locate information and comprehend the text as a result of this.

4. Types of Reading

  According to (Patel and Jain, 2008) there are four types of reading as follows :

a. Intensive Reading

  Text reading or passage reading are both examples of intensive reading. The reader reads the material to gain information or make an analysis. The purpose of this reading is to read a less amount of material. This reading is carried out to obtain particular information. Intensive reading occurs when a student reads a book to gain knowledge.

b. Extensive Reading

  The goal of extensive reading is to educate the reader on how to read fluently and directly in the target language for pleasure without the help of the teacher. Extensive reading can be used to provide oral reports for the remainder of the class or a full class discussion.

Reading for enjoyment is referred to as extensive reading. The reader is interested in learning more about something. After reading, the reader is unconcerned with particular or critical facts. People usually read to stay informed.

c. Reading Aloud

Reading aloud is also an important part of English learning. Teachers should be aware that reading aloud instruction should begin at the elementary level since it is the foundation of word pronunciation. It will be quite tough at the secondary level if it is not taken care of.

d. Silent Reading

Silent reading is an important ability in English instruction. This reading should be used to help students improve their reading skills. Silent reading is used to get a large amount of information. When they can read without difficulty, the teacher should have them read silently. It's a habit in which students are allowed to read without making an audible whisper.

B. The Nature of Jigsaw Technique

1. Jigsaw Technique

Jigsaw techniques is a part of cooperative learning. Cooperative learning is a teaching term or technique used to describe a teaching method that promotes interaction and cooperation between groups of students and they work in small groups to support each other in their learning content towards a common goal. The jigsaw technique is one of the cooperative learning strategies that require student-student interaction in all activities (Alfaruqy, 2021). This jigsaw technique is a great learning technique that can be used by elementary, middle, and high school students. Cooperative learning is a word or teaching technique that describes a teaching style that encourages student participation and cooperation with their groups, in which students cooperate in small groups

to help each other in the study of a subject of study in order to achieve a common goal.

This learning facility used a jigsaw technique and is divided into two parts: positive interdependence social skills and equitable participation, and academic abilities in obtaining information and comprehension. The jigsaw group was divided into two groups when studying this jigsaw technique: the original group and the expert group. The original group is the first group of students, consisting of several members of the expert group, while the expert group consists of another group (the original group) who play a major role in researching a topic and then explaining what he has learned to the original group. Jigsaw is a collaborative learning activity that asks students to talk to each other to fill knowledge gaps and integrate with other data.

There are five principles for the jigsaw technique (Johnson, Johnson, and Holubec, cited in Mengduo and Xiaoling, 2010):

a. Positive interdependence

The contributions of each group member are required and indispensable for the group's success. Each group member must contribute something distinctive to the overall effort.

b. Face-to-face promotive interaction

Members of the group must informally describe how to solve issues, teach others the knowledge, check for understanding, discuss topics being taught, and link current learning to previous learning.

c. Individual and group accountability

The group size should be maintained small, since the smaller the group size, the higher the individual accountability. The teacher is expected to give each student an individual test, randomly examine students by asking one student to present his or her group's work orally to the teacher (in front of the group) or the entire class, observe each group and record the frequency with which each member contributes to the group's work, appoint one student in each group as the leader,

who is responsible for asking other group members to explain the rationale underlying the group an idea and assign one student in each group as the leader, who is willing to take responsibility.

d. Interpersonal skills

Jigsaw learning in class requires social skills to be successful. Leadership, decision-making, trust-building, communication, and conflict-management abilities are examples of social skills.

e. Group processing

Members of the group evaluate how effectively they are reaching their goals and maintaining successful working relationships, identify which member activities are beneficial and which are not, and decide whether to continue or alter certain behaviors.

2. Steps in Implementing Jigsaw Technique in the Classroom

The jigsaw classroom has ten steps, (Aronson, cited in Adams, 2013). That is:

a. Students will divided into jigsaw groups of 5 or 6 students. In terms of ethnicity, gender, ability, and race, the group should be varied

b. The group leader should be chosen from each of the students. This individual should be the group's most mature student at first.

c. The day's lesson is divided into 5-6 sections (one for each member).

d. Each student is given a portion to study. Each student should have sole control over their portion.

e. Allow students to read their portion at least twice to become familiar with it. Students don't need to learn it by memory.

f. Make temporary expert groups consisting of one student from each jigsaw group and additional students allocated to the same section. Students in this expert group should have the opportunity to discuss the major themes of the segment and practice presenting to the jigsaw group.

g. Students return to their jigsaw group.

h. Students give a presentation to the group, and other members are asked to offer clarifying questions.

i. To watch the process, the teacher must move from group to group. If any group is having problems, such as members who are dominating or disruptive. There will come a time when the group leader will have to handle this duty. Teachers can whisper instruction to the group leader on how to help until the group leader is able to do so successfully.

j. At the end of the session, students should be given a jigsaw on the topic so that they understand that the sessions are not only for fun and games but that they are important.

3. Advantages of Jigsaw Technique

There are four advantages of jigsaw technique (Shoimin, cited in Pratiwi, 2021) :

a. It enables students to develop their creativity, talents, and problem-solving skills in accordance with their own goals.

b. The interaction between the teacher and the student is balanced, allowing for a close learning environment that promotes harmony.

c. Encourage teachers to be more active and innovative in their job. Capable of combining multiple learning methods.

Be able to combine a number of learning methods, such as class, group, and individual instruction.

4. Disadvantages of Jigsaw Technique

There are four advantages of the jigsaw technique (Shoimin,, cited in Pratiwi, 2021) :

a. If the teacher does not want students to employ cooperative skills in groups all of the time, each group is afraid of being caught in the debate.

b. There will be issues if the group members are lacking.

c. Taking longer, especially if the spatial planning isn't yet well-conditioned, thus changing postures that might cause noise takes time.

5. Previous Studies

The researcher evaluated past similar studies completed by other researcher while discussing the use of the jigsaw technique to improve students' reading comprehension. To support this research, as follows:

a. (Anandita, 2020),"Improving Reading Comprehension Ability of the Eleventh Grade Students of MAN 5 Jombang Through Jigsaw Technique".

The reading comprehension difficulties encountered by MAN 5 Jombang 11th graders can be solved by using jigsaw techniques in the teaching and learning process. The hypothesis that the jigsaw techniques can increase reading comprehension in 11th graders of MAN 5 Jombang is correct. Therefore, it can be inferred that jigsaw can help students improve their reading comprehension in grade 11 grade at MAN 5 Jombang in the academic year 2014/2015.

b. (Alfaruqy, 2021)"The Implementation of the Jigsaw Technique to Increase Students' Listening Achievement and Motivation Aspects".

It can be concluded that students' listening comprehension improved significantly after being taught the jigsaw technique. The increase in the average score of students on the test (71.45), which is higher than the average score on the previous test, shows this (49.13). Because the jigsaw technique can increase student motivation and interaction, and increase the enjoyment of the learning experience. So, teaching listening skills and using jigsaw techniques is more appropriate.

c. (Marleni, 2016)"Improving Students' Reading Comprehension of Recount Texts Through Jigsaw Technique at Class VIII a Of Mts Darul Falah Salo".

In Class VIIIA Mts Darul Falah salo, jigsaw techniques can help students improve reading comprehension of story content. From cycle 1, cycle 2, and cycle 3, there was a significant improvement in the teaching and learning process, as well as an increase in scores on the reading comprehension test. Jigsaw techniques contribute positively and

produce better results in improving reading comprehension of recount texts.

d. (Halimah, Purba, and Rachmijati, 2019)"improving Students' Reading Comprehension Through Jigsaw Technique".The jigsaw technique was successful in improving students' reading comprehension in experimental classes. Jigsaw techniques have a positive effect on students and encourage them to participate in the learning process.